Aqueous dispersions of water-soluble polymers of ethylenically unsaturated anionic monomers, their preparation and their use

Abstract

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Aqueous dispersions of water-soluble polymers of ethylenically unsaturated anionic monomers are obtainable by free radical polymerization of the monomers in an aqueous medium in the presence of at least one stabilizer, the polymerization being carried out in the presence of at least one water-soluble polymer of the groups consisting of

- (a) graft polymers of vinyl acetate and/or vinyl propionate on polyethylene glycols, polyethylene glycols blocked at one or both terminal groups with alkyl, carboxyl or amino groups,
- 15 copolymers of alkyl polyalkylene glycol acrylates or alkyl polyalkylene glycol methacrylates and acrylic acid and/or methacrylic acid, polyalkylene glycols, polyalkylene glycols blocked at one or both terminal groups with alkyl, carboxyl or amino groups,

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(b) hydrolyzed copolymers of vinyl alkyl ethers and maleic anhydride in the form of the free carboxyl groups and in the form of the salts at least partly neutralized with alkali metal hydroxides or ammonium bases, and/or of water-soluble starch from the group consisting of cationically modified potato starch, anionically modified potato starch, degraded potato starch and maltodextrin as a stabilizer, said aqueous dispersions are prepared by free radical polymerization of the monomers in an aqueous medium in the presence of the abovementioned watersoluble polymers of the groups (a) and (b) and said aqueous dispersions are used as thickeners for aqueous systems.